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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,988	04/11/2001	Takehiko Shioda	Q64054	8920

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EXAMINER

VO, HUYEN X

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,988

Applicant(s)

SHIODA ET AL.

Examiner

Huyen Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant has submitted an amendment filed 12/6/2004 arguing to traverse the art rejection based on a limitation regarding *"when a quick traverse playback command or a returning playback command is given by the operation section, the control section controls the switching section and selectively outputs the temporarily stored data which is not stored in the first storage section"* (second paragraph in page 2 of the remark section). Applicant's arguments have been fully considered but they are not persuasive. Tsukamoto et al. disclose a playback system in that a portion of the audio data of each program is loaded to the memory 16 shown in figure 5. When a quick traverse playback command or a quick returning playback command is detected, said portion of the audio data of each program that was initially stored in the memory 16 is read out. The time it takes for the system to play back the stored audio data gives the servo and disc motor the time needed to response to command entered to read out the remaining portion of the audio data from the disc (*referring to the operation of figure 1, also referring to elements 140 in figure 9 for input command to enable the playback system to jump track*). By doing this, the system reduces the overall delay in response to a playback command. Therefore, previous ground of rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4, 7-11, 13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukamoto et al. (US Patent No. 5748585).

4. Regarding claims 1 and 10, Tsukamoto et al. disclose a play back apparatus in which, according to a play back command from an operation section, the PCM audio data is generated from compression data in which the audio information is coded, and an audio is played back according to the PCM audio data, the play back apparatus comprising:

a control section for conducting the control of each section of said apparatus according to each kind of commands from an operation section (*microprocessor 11 of figure 1*);

a compression decoder for decode processing the compression data, generating the PCM audio data, and successively outputting thereof (*Decoder 21 of figure 1, the output of the decoder is the PCM audio data needed for converting to analog signal*);

a first storage section for successively renewing the temporarily stored data successively generated according to the PCM audio data and temporality storing thereof, and appropriately repeatedly reading out the temporarily stored data which is temporarily stored, and successively outputting thereof (*Buffer memory 16 of figure 1 or referring to col. 21, ln. 45 to col. 22, ln. 9*); and

a switching section for selecting either one of the PCM audio data successively outputted from the compression decoder or the temporarily stored data stored in first storage section, and outputting thereof (*Selector 321 in figure 30*), wherein when a quick traverse playback command or quick returning play back command is given by the operation section, the control section controls the switching section and selectively outputs the temporarily stored data stored in the first storage section (*col. 29, ln. 23 to col. 30, ln. 67, upon receiving instruction from the users, the system shifts the beam spot to a new address to begin reading out data at that address. However, before waiting for the beam spot to be shifted to the requested address, the data for that particular program stored in the memory 16 is read out*).

5. Regarding claims 2 and 11, Tsukamoto et al. further disclose that the temporarily stored data includes the PCM audio data to play back the special audio in which the quick traverse play-back audio of the audio information, or the quick returning play-back audio is converted into an imitation sound (*col. 20, ln. 52-67 and col. 29, ln. 23 to col. 30, ln. 67, while waiting for the beam spot to be shifted to the requested address, the data for that particular program stored in the memory 16 is read out, decoded, and played back*).

6. Regarding claims 4 and 13, Tsukamoto et al. further disclose that the first storage section includes a predetermined number of storage addresses (*figure 4*), and successively reads in the temporarily stored data successively generated according to

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the PCM audio data successively outputted from the compression decoder (*the operation of the CUEING SECTION 212 in figure 17 specify to SERVO CIRCUIT at which address data should be read out*), and successively stores in the address specified by the control section (*users decide with track to be played at control circuit 220 in figure 17 and the corresponding address is stored in the TOC DATA HOLDING CIRCUIT 216 in figure 17*).

7. Regarding claims 7 and 16, Tsukamoto et al. further disclose that the control section controls in such a manner that, before the each kind of command is given from the operation section, the control section judges whether the temporarily stored data is already stored in the first storage section, and when it is judged that the temporarily stored data is not yet stored in the first storage section, the control section makes the decode processing of the compression data by the compression decoder start, and generates the PCM audio data, and makes the PCM audio data successively output from the compression decoder, and makes the temporarily stored data generated according to the PCM audio data, temporarily stored in the first storage section (*col. 22, ln. 42 to col. 23, ln. 28, the control unit judges whether the disc is loaded. If loaded, the beginning portions of the program are read out and stored in the memory 16*).

8. Regarding claims 8 and 17, Tsukamoto et al. further disclose that a second storage section for storing the default data including the PCM audio data having a predetermined data amount (*that is the disc to be played by the system*), wherein the

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control section controls in such a manner that, before each kind of command is given from the operation section, the control section judges whether the temporarily stored data is already stored in the first storage section, and when it is judged that the temporarily stored data is not yet stored in the first storage section, the temporarily stored data according to the default data stored in the second storage section is read in the first storage section, and temporarily stored (col. 22, ln. 42 to col. 23, ln. 28, *the control unit judges whether the disc is loaded. If loaded, the beginning portions of the program are read out and stored in the memory 16. The default data is considered as the beginning portion of each programs loaded to memory 16*).

9. Regarding claims 9 and 18, Tsukamoto et al. further disclose that the default data includes the PCM audio data to play back the special audio in which the quick traverse play back audio, or the quick returning play back audio of the audio information is converted into an imitation sound (col. 20, ln. 52-67 and col. 29, ln. 23 to col. 30, ln. 67, *while waiting for the beam spot to be shifted to the requested address, the data for that particular program stored in the memory 16 is read out, decoded, and played back*).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto et al. (US Patent No. 5748585) in view of Huang et al. (US Patent No. 5970031).

12. Regarding claims 3 and 12, Tsukamoto et al. do not disclose that the temporarily stored data includes the data obtained by extracting the PCM audio data outputted from the compression decoder at a predetermined interval. However, Huang et al. teach that the temporarily stored data includes the data obtained by extracting the PCM audio data outputted from the compression decoder at a predetermined interval (*elements 370, 390, and 500 of figure 4 or referring to col. 5, ln. 57 to col. 6, ln. 62*). The advantage of using the teaching of Huang et al. in Tsukamoto et al. is to provide good audio quality by preventing uninterrupted playback even when the data reading operation on the optical disc is being interrupted.

Since Tsukamoto et al. and Huang et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Tsukamoto et al. by incorporating the teaching of Huang et al. in order to provide good audio quality by preventing uninterrupted playback even when the data reading operation on the optical disc is being interrupted.

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13. Claims 5-6 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto et al. (US Patent No. 5748585) in view of Nakamura et al. (US Patent No. 6061496).

14. Regarding claims 5-6 and 14-15, Tsukamoto et al. do not disclose that when the quick traverse play or quick returning back command is given by the operation section, the temporarily stored data stored in the first storage section is repeatedly read out in the stored order in the order reversed to the stored order, respectively, and successively outputted as the output data.

However, Nakamura et al. teach that when the quick traverse play or quick returning back command is given by the operation section, the temporarily stored data stored in the first storage section is repeatedly read out in the stored order in the order reversed to the stored order, respectively, and successively outputted as the output data (*col. 13, ln. 44-67, this concept is also applied audio signal*). The advantage of using the teaching of Nakamura et al. in Tsukamoto et al. is to provide users the option to fast-forward and/or replay the program of their interest.

Since Tsukamoto et al. and Nakamura et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Tsukamoto et al. by incorporating the teaching of Nakamura et al. in order to provide users the option to fast-forward and/or replay the program of their interest.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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HXV

April 26, 2005


SUSAN MCFADDEN
PRIMARY EXAMINER